Locksley Resources

EXPLORATION UPDATE

ASX RELEASE
30 January 2024

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LOCATION: Southern California, USA

COMPLETION OF MOJAVE REE NORTH BLOCK STREAM SEDIMENT SAMPLING PROGRAM

Locksley Resources Limited is pleased to announce the completion of the follow-up stream sediment sampling program for high-grade REE's anomalism within the North Block Claim – Mojave Project, CA.

Highlights:

- Follow-up sampling of the anomalous catchment areas on the North Block have been completed, with assay results expected in Q1 2024
- 245 stream sediments and 27 rockchip samples were collected during the program
- The sediment sampling program focused on following up multiple highly elevated REE stream sediment catchments announced in September 2023[1]
- The North Block of the Mojave Project is immediately adjacent to the Mountain Pass REE Mine, the only operating REE mine in the US

Locksley Resources Limited (ASX:LKY) ("Locksley" or "the Company") is pleased to announce completion of follow-up stream sediment sampling within the North Block at the Mojave Project which previously returned highly anomalous results up to 0.26% (2,600ppm) TREO. These results represent additional REE potential within the North Block. Locksley Resources personnel were accompanied by the US based MINEX Corp team and conducted extensive thorough field examination including geological mapping and sampling to further identify REE anomalism across the broader North Block at the Mojave Project.

Locksley Resources Limited Managing Director, Steve Woodham commented:

"The follow up work at the Mojave North Project is encouraging, Stream sediment numbers of this magnitude are usually a good sign that we are getting close to the source. We are confident that we are closing in on a geological feature with considerable REE potential.

Locksley will be mobilising a field crew before the end of February to complete the follow up sampling and mapping work which should provide the Company with a strong foundation for a drilling campaign.

I look forward to keeping Locksley shareholders informed of the results."

1. *LKY Announcement – 28th September 2023*

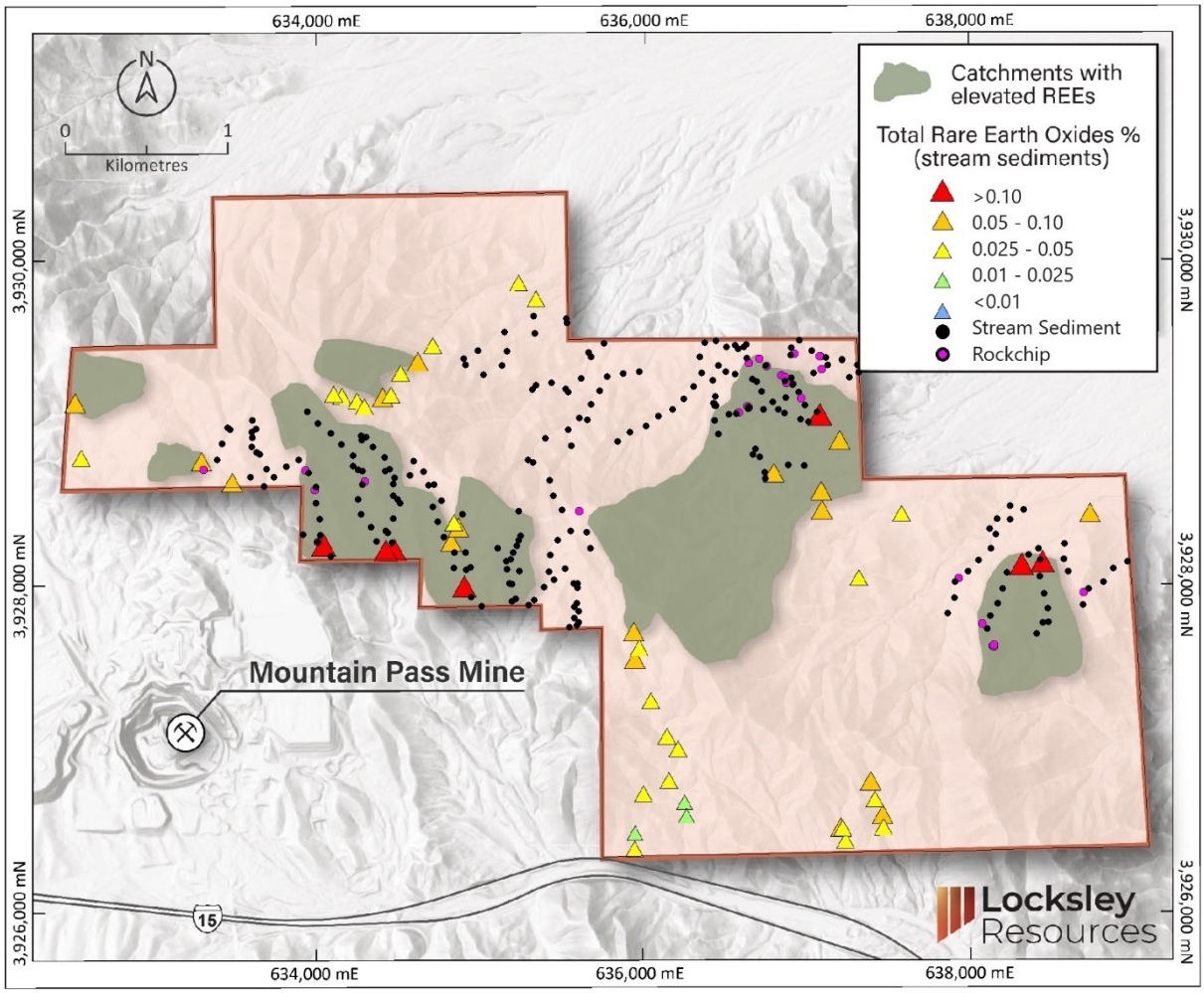

Figure 1. MOJAVE NORTH BLOCK – Catchments displaying highly anomalous REE mineralisation in stream sediment samples along with follow-up sample locations from recent field activities

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Locksley Resources Limited through its 100% owned subsidiary Enigma Strategic Minerals LLC collected 245 stream sediment and 27 rockchip samples within the Company's North Block Claim, located in San Bernardino Country, California. Samples were collected from dry stream beds over a broadly spaced area within the North Block as an early exploration tool to cover large areas of the claim with the aim of focusing in on the source(s) of the highly elevated REE's.

Samples are currently being processed and assayed at the Bureau Veritas Laboratory located in Sparks, Nevada. Locksley Resources will release the results once they have been received.

The recently completed sampling program was designed to follow-up the anomalous stream sediments results from the North Block to narrow down the potential outcropping source of the highly anomalous results. In addition to followed-up stream sampling, reconnaissance rock chip sampling was also conducted in areas where potential shedding/erosion of REE was concurrent within the erosional/ depositional system.

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Figure 2. MOJAVE NORTH BLOCK – Folded gneiss outcrop located alongside a dry stream bed

The Board of Directors of Locksley Resources Limited authorised the release of this announcement.

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Compliance Statements

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. No representation is made that, in relation to the tenements the subject of this presentation, the Company has now or will at any time the future develop resources or reserves within the meaning of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.

Cautionary Statement

Visual estimates described in the announcement are a guide only and should never be considered a proxy or substitute for laboratory analysis. Only subsequent laboratory geochemical assay can be used to determine grade of mineralisation. LKY will always update shareholders when laboratory results become available.

Competent Persons

The information in this document that relates to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by David Ward BSc, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM), (Member 228604). David Ward is a shareholder of Locksley Resources Ltd. David Ward has over 25 years of experience in metallic minerals mining, exploration and development and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a 'Competent Person' as defined under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ward consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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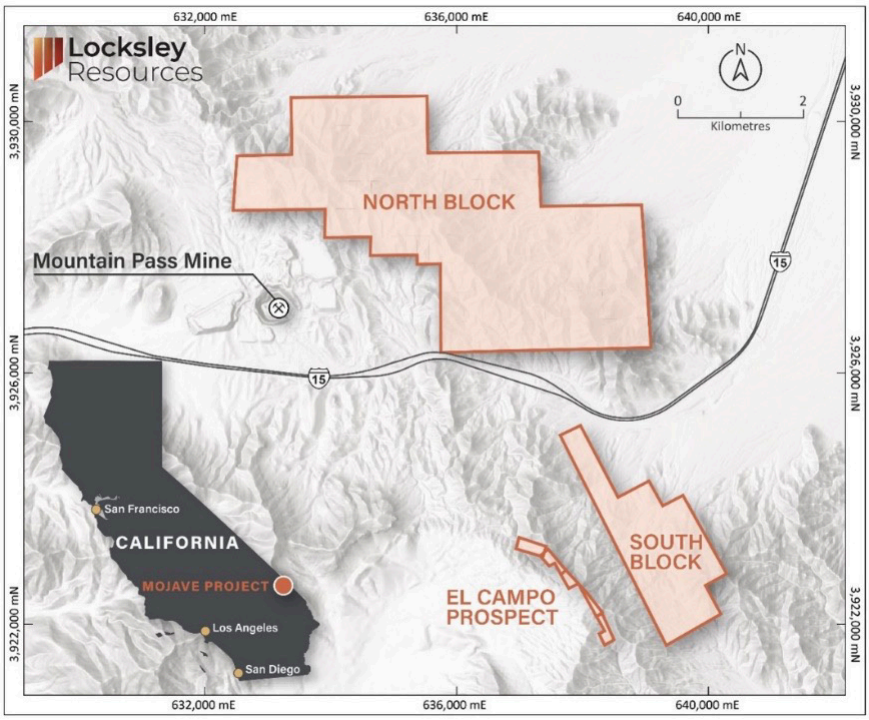
About Locksley Resources Limited

Locksley Resources Limited (ASX:LKY) is an ASX-listed minerals explorer with a focus on copper, gold and base metal assets throughout Australia. LKY is also active in exploring for Rare-Earth Element (REE) projects located in the United States of America (USA), positioning LKY as a player in the fast-growing REE exploration market. LKY aims to build shareholder wealth through the discovery and development of mineral deposits across various Australian and USA projects; being the Tottenham Project and Mojave Project.

Mojave Project

The Mojave Project is in the Mojave Desert, California, USA. Consisting of three areas: The North Block is comprised of 164 claims totalling 14.9 km², South Block comprising of 32 claims totalling 3.5 km², and El Campo Prospect comprising of 5 claims totalling 0.34 km².

The Mojave Project is positioned next to one of the highest-grade REE mines in the world and multiple significant carbonatite REE veins have been identified. The Mojave Project has returned high grade TREO rock-chip results of up to 9.49%.



MOJAVE PROJECT – Location of the Mojave Project Blocks in south-eastern California, USA

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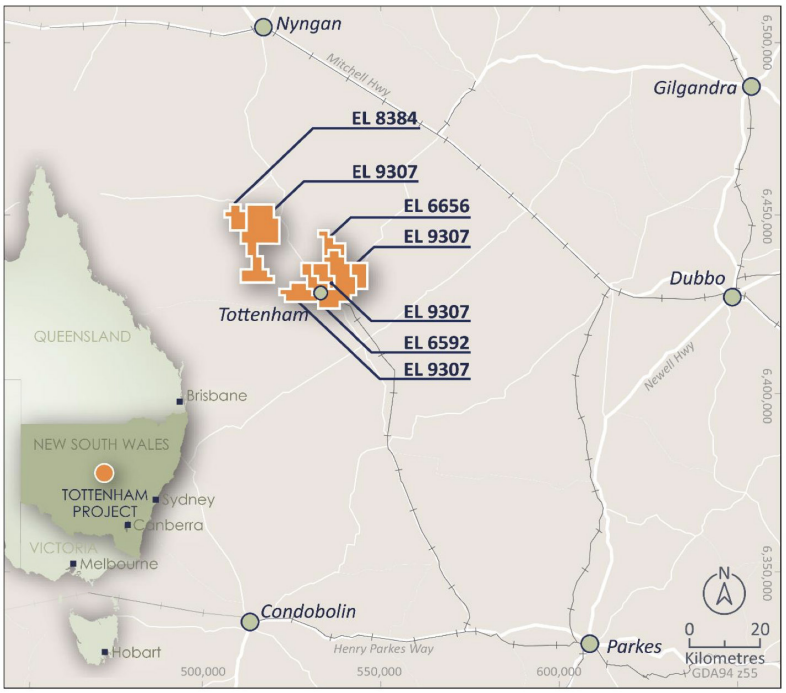
Tottenham Project

The Tottenham Project is an advanced Cu-Au exploration project that consists of four Exploration Licences, (EL6592, EL6656, EL8384, EL9307), covering 470km2, located in the Lachlan Fold Belt of central New South Wales.



TOTTENHAM PROJECT – Location of the Tottenham Project in central NSW, Australia

The Tottenham deposits are hosted within the Ordovician Girilambone Group that also host the Tritton and Girilambone Mines and Constellation Deposit, 110km to the north-northwest (Aeris Resources Ltd.), and is immediately along strike from the CZ Copper Deposit (Helix Resources Ltd). Resources have been defined at both the Mount Royal to Orange Plains and Carolina Deposits for a global inferred resource of:

9.86Mt @ 0.72% Cu, 0.22g/t Au, 2g/t Ag at a 0.3% Cu cut off

The Competent Person for the Tottenham Project 2022 Resource is Mr Jeremy Peters FAusIMM CP(Geo, Min), a Director of Burnt Shirt Pty Ltd. The Mineral Resource estimate is stated in accordance with the provisions of the JORC Code (2012). Mr Peters has more than five years' experience in the estimation and reporting of Mineral Resources for base metals mineralisation in Australia and overseas, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Peters consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The stream sediment samples referred to in this release were stream sediment samples collected by Locksley Resources Limited staff, and MINEX, professional US based exploration consultants assisting the Company with geochemical surface sampling. A total of 245 stream sediment and 27 rockchip samples were collected and are currently being processed and assayed for a suite of elements including gold, base metals, and rare earth elements. • Sample site selection was entered into a Garmin GPS for sample crew field location. • Verbal instructions on sample procedure were given to MINEX field crews from Locksley Resources staff. • Sample sites were dry intermittent stream bed with three holes dug 15-30cm in depth with a hole radius of 15 cm. Each hole was located approximately 1 meter apart. Material from each hole was screened through a 1mm screen into a gold pan. The material from the 3 holes was combined into one sample and bagged into a 5" x 8" olefin sample bag.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling reported.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No drilling reported.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate*	• Logging was qualitative or quantitative nature. • Stream sediment samples were all collected within the North Block

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Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	claim boundary within the Mojave Project.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sub-sampling • Stream sediment samples were collected with the sample number written on each sample bag in permanent marker and a sample tag was placed in each bag. • Each sample was recorded with a paper card description, sample photo (rockchip only), and sample GPS location.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The 245 stream sediment samples collected and referred to within this release were systematically sampled and numbered, and samples were submitted to Bureau Veritas (BV) laboratory located in Sparks, Nevada, USA for processing and then transported BV's laboratory located in Vancouver, Canada for analysis. • No geophysical tools were used in the determination of assay results regarding the samples highlighted in the press release.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Location data has been uploaded to the LKY database. • No geochemical data has been received, and samples are still currently being processed for assaying.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations*	• Methods used to obtain location of samples are a hand-held GPS with an accuracy of +-5m.

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Criteria	JORC Code explanation	Commentary
	used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All stream sediment sample locations were obtained using Universal Transverse Mercator NAD83 Zone11 format.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing is consistent. Stream sediment samples were collected approximately every 100m. • Sampling is not sufficient to calculate a mineral resource estimate. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Samples were collected within the boundary of the North Block in catchment areas and dry stream beds located around low relief areas where surface run-off is likely to accumulate.
Sample security	• *The measures taken to ensure sample security.*	• The sample chain of custody has been managed by the employees of Locksley Resources Limited and US based MINEX. • Once collected, the samples were placed in a secure location and transported to the BV laboratory in Sparks, Nevada for processing, and then transported to BV's Vancouver laboratory for analysis. • Chain of Custody documentation was maintained. • QA/QC protocol was implemented for all samples collected.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data and sampling techniques have not been reviewed or audit.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Mojave Project combines to a total area of 18.74 km^2 and is a Rare Earth Element (REE) project located to the east and southeast of the Mount Pass Mine in San Bernardino Country, California. The project area lies to the north of and adjacent to Interstate-15 (I-15), approximately 24 km southwest of the California-Nevada state line

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Criteria	JORC Code explanation	Commentary
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	and approximately 48 km northeast of Baker, California USA. This area is part of the historic Clark Mining District established in 1865 and Mountain Pass is the only REE deposit identified within this district. The project is accessed via the Baily Road Interchange (Exit 281 of I-15) and the southern extensions of the project area can be accessed via Zinc Mine road.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Surface sampling was completed by Locksley Resources staff in conjunction with MINEX staff, who assisted Locksley with site familiarisation, sampling, and logistical aspects of the surface sampling program.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Mojave Project is located in the southern part of the Clark Range in the northern Mojave Desert. The Mojave Desert is situated in the southwestern part of the Great Basin province, a region extending from central Utah to eastern California. The region is characterised by intense Tertiary regional extension deformation. This deformational event has resulted in broad north-south trending mountain ranges separated by gently sloping valleys, a characteristic of Basin and Range tectonic activity. The Mountain Pass Rare Earth deposit is located within an uplift block of Precambrian metamorphic and igneous rocks that are bounded on the southern and eastern margins by basin-fill formations in the Ivanpah Valley. The block is separated from Palaeozoic and Mesozoic rocks to the west by the Clark Mountain fault, which strikes north-northwest and dips steeply to the west. Mountain Pass, located within 1.4 km to the Mojave Project, is a carbonatite hosted rare earth deposit. The mineralisation is hosted principally in carbonatite igneous rock and Mountain Pass is the only known example of rare earth deposit in which bastnasite is mined in the primary magmatic economic mineral.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole*	• No drilling reported.

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Criteria	JORC Code explanation	Commentary
	○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data aggregation, all results mentioned in the body of the press release were reported in the announcement dated 28th September 2023.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No drilling reported. True widths of mineralisation cannot be interpreted from the results received to date. • The geological boundaries of the prospective horizon were interpreted by field geologists, who engaged in mapping of lithological boundaries and conducted outcrop orientation to determine dip and dip direction.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• No drilling reported. Locations of all significant results were reported in the announcement dated 28th September 2023.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All material results were reported in the announcement dated 28th September 2023. • Results of stream sediment samples mentioned in the announcement dated 28th September 2023 were calculated using a stoichiometric conversion table of recently received assay results, with the intention of calculating total rare earth oxides (TREO).
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,*	• All material results were reported in the announcement dated 28th September 2023.

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Criteria	JORC Code explanation	Commentary
exploration data	*groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The stream sediment sampling program were from a follow-up stream sediment sampling program targeting previously detected elevated REE stream sediment results. If elevated REE values are obtained from analysis within the stream sediment sampling program that has recently been conducted, further work may, but not limited to additional stream sediment sampling, geophysical surveys and drilling.